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UNITED STATES PATENT AND TRADEMARK OFFICE

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ART UNIT	PAPER NUMBER
2162	

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Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

		Application No.	Applicant(s)
Office Action Summary		09/829,461	STREEPY, LARRY V.
		Examiner	Art Unit
		HUNG Q PHAM	2162

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>23 August 2004</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>31-78</u> is/are pending in the application.

 4a) Of the above claim(s) <u>51-60 and 74-78</u> is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>31-50 and 61-73</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>23 August 2004</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

 a)☐ All b)☐ Some * c)☐ None of:

  1.☐ Certified copies of the priority documents have been received.

  2.☐ Certified copies of the priority documents have been received in Application No. _____.

  3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

 * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

U.S. Patent and Trademark Office

PTOL-326 (Rev. 1-04)   Office Action Summary   Part of Paper No./Mail Date 013105

DETAILED ACTION

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

    I.   Claims 31-50 and 61-73 are drawn to a method and system for interfacing with a multi-level data structure by selecting a concept object, displaying the selected concept object, parent, child, lateral concept objects of the selected concept object and association between concept objects, classified in class 707, subclass 104.1.

    II.   Claims 74-78 are drawn to a system for generating a relationship between concept objects via a user interface by mapping the concept objects to the display, associating a relationship between concept objects using a symbol, classified in class 707, subclass 102.

The inventions are distinct, each from the other because of the following reasons:

Inventions I-II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. For example, Group I is drawn to a method and system for interfacing with a multi-level data structure by selecting a concept object, displaying the selected concept object, parent, child, lateral concept objects of the selected concept object and association between concept objects, Group II is drawn to a system for generating a relationship between concept objects via a user interface by mapping the

concept objects to the display and associating a relationship between concept objects using a symbol. See MPEP 806.05(d).

Applicant's election with traverse of Group I, Claims 31-50 and 61-73 in the telephonic interview with examiner on February 03, 2005 is acknowledged. Non-elected claims 74-78 are withdrawn from further consideration.

Response to Arguments

Applicant's arguments with respect to claims 31-50 and 61-65 have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

Applicant's amendment of claim 62, with respect to the objection as set forth in the Office Action 05/06/2004 has been fully considered. The objection of claim 62 has been withdrawn.

Drawings

The drawings were received on 08/23/2004. These drawings are accepted by examiner.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 31, 33 and 35-41 are rejected under 35 U.S.C. 102(e) as being

anticipated by Neshatfar et al. [USP 6,490,581 B1].

Regarding claims 31 and 41, Neshatfar teaches a method and a computer

program for representing elements and relationships captured in a relational database.

As illustrated at FIG. 3, a plurality of *concept objects stored in the multi-level data structure* is

displayed. To get the detail of an object, a user can select a particular object for

displaying, for example: CFamily (Col. 8, Lines 4-14).

- As illustrated at FIG. 4, by clicking on the FATHER as *selecting a concept*

  object, the CPerson class and its inheritance CAnimal are exposed (Col. 8, Lines

  24-25).

- As shown at FIG. 4 is the step of *displaying* father as *a first image in a*

  central region of a rectangular *area* around the word father, *the first image comprising*

  the selected concept object;

- *displaying* CFamily as *one or more second images above the first image*, CFamily as *each second image comprising* CFamily as *a parent concept object of* father as *the selected concept object*;

- *displaying* the square box includes a minus sign as *a first symbol along a geometrical ray originating from the first image* and an indent inward to signify the parent-child relationship for *illustrating an association between each second image to the first image*;

- father as *the selected concept object has* CPerson as *one or more child concept objects, displaying* CPerson as *one or more third images below the first image*, CPerson as *each third image comprising* CPerson as *one of the child concept objects of the selected concept object*, and *displaying* → is a CPerson as *a second symbol along a geometrical ray originating from the first image and illustrating* is-a relationship as *an association between* CPerson as *each third image and* father as *the first image*;

- father as *the selected concept object has* mother as *one or more lateral concept objects, displaying* mother as *one or more fourth images along a geometrical ray originating from the first image, each fourth image comprising* mother as *a lateral concept object of* father as *the selected concept object*, and *displaying* the square box includes a plus sign without an indent inward as *a third symbol illustrating an association between each fourth image and the first image*.

Regarding claim 33, Neshatfar teaches all of the claimed subject matter as discussed above with respect to claim 31, Neshatfar further discloses *the first, second, third and fourth images comprise text strings* (FIG. 4).

Regarding claim 35, Neshatfar teaches all of the claimed subject matter as discussed above with respect to claim 31, Neshatfar further discloses *the first, second, third and fourth images, and the first, second and third symbols are displayed within a first view area* (FIG. 4).

Regarding claim 36, Neshatfar teaches all of the claimed subject matter as discussed above with respect to claim 35, Neshatfar further discloses the step of *displaying one or more attributes of the selected concept object* (FIG. 4).

Regarding claim 37, Neshatfar teaches all of the claimed subject matter as discussed above with respect to claim 36, Neshatfar further discloses the step of *displaying one or more details of the selected concept object* (FIG. 5).

Regarding claim 38, Neshatfar teaches all of the claimed subject matter as discussed above with respect to claim 37, Neshatfar further discloses the step of *displaying one or more terms associated with the selected concept object* (FIG. 6).

Regarding claim 39, Neshatfar teaches all of the claimed subject matter as discussed above with respect to claim 38, Neshatfar further discloses the step of *displaying a work area for temporarily storing terms* (FIG. 6).

Regarding claim 40, Neshatfar teaches all of the claimed subject matter as discussed above with respect to claim 35, Neshatfar further discloses the step of *selecting either a microglossary panel, a term facet panel, a relations facet panel or a term phrase editor panel; and displaying the selected panel in a second viewing area* (FIG. 5).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Neshatfar et al. [USP 6,490,581 B1].

Regarding claim 32, Neshatfar teaches all of the claimed subject matter as discussed above with respect to claim 31, and further discloses the steps of *selecting a new concept object from one of the selected concept object, one or more parent concept objects, one or more children concept objects, and one or more lateral concept objects; displaying a fifth image*

comprising the selected new concept object; displaying one or more sixth images, each sixth image

comprising a parent concept object of the selected new concept object; displaying a fourth symbol

illustrating an association between each sixth image and the fifth image; if the selected new concept

object has one or more child concept objects, displaying one or more seventh images, each seventh

image comprising a child concept object of the selected new concept object, and displaying a fifth

symbol illustrating an association between each seventh image and the fifth image (FIG. 4 and the

displaying when selecting CPerson). The missing in FIG. 4 is the claimed *if the selected*

new concept object has one or more lateral concept objects, displaying one or more eighth images,

each eighth image comprising a lateral concept object of the selected new concept object, and

displaying a sixth symbol illustrating an association between each eight image and the fifth image.

However, if CPerson has a lateral concept object similar to `mother` and `father` as

discussed in claim 31, obviously, the step of displaying an eight image and a sixth

symbol will take place. It would have been obvious for one of ordinary skill in the art at

the time the invention was made to include the step of displaying an eight image and a

sixth symbol if CPerson has a lateral concept object in order to represent elements and

relationships captured in a relational database.

Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over

Neshatfar et al. [USP 6,490,581 B1] in view of Cerveri et al. [Java Interface to

Human Anatomy Knowledge].

Regarding to claims 34, Neshatfar teaches all of the claimed subject matter as

discussed above with respect to claim 31, but does not explicitly teach *the first image is*

highlighted. However, highlight a selected object is a conventional technique. For

example, this technique is taught by Cerveri as discussed in previous action (Cerveri,

FIG. 5a). It would have been obvious for one of ordinary skill in the art at the time the

invention was made to highlight a selected object in order to distinguish elements and

relationships captured in a relational database.

Claims 42, 43 and 50 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Neshatfar et al. [USP 6,490,581 B1] in view of White et al. [USP

6,618,733 B1].

Regarding claim 42, Neshatfar teaches a computer program for representing

elements and relationships captured in a relational database. As illustrated at FIG. 3, a

plurality of *concept objects stored in the multi-level data structure* is displayed. To get the detail

of an object, a user can select a particular object for displaying, for example: CFamily

(Col. 8, Lines 4-14).

- As illustrated at FIG. 4, by clicking on the FATHER as *selecting a concept*

    object stored in the multi-level data structure, the CPerson class and its inheritance

    CAnimal are exposed (Col. 8, Lines 24-25).

- As shown at FIG. 4 is the step of *displaying* father as *a first image comprising*

    an alphanumeric string representing the selected concept object on the display; and

- *displaying* CFamily as *one or more second images on the display, each second image*

    comprising CFamily as *an alphanumeric string representing a parent concept object of*

father as *the selected concept object; displaying* the square box includes a minus

sign as *a first symbol on the display* and an indent inward to signify the parent-child

relationship for *illustrating an association between each second image and the first image;*

- father as *the selected concept object has* CPerson as *one or more child concept*

objects, displaying CPerson as *one or more third images on the display,* CPerson as *each*

third image comprising CPerson as *an alphanumeric string representing a child concept*

object of the selected concept object, and *displaying* → is a CPerson as *a second symbol*

on the display illustrating is-a relationship as *an association between* CPerson as *each*

third image and father as *the first image;*

- father as *the selected concept object has* mother as *one or more lateral concept*

objects, displaying mother as *one or more fourth images on the display, each fourth image*

comprising mother as *an alphanumeric string representing a lateral concept object of*

father as *the selected concept object,* and *displaying* the square box includes a plus

sign without an indent inward as *a third symbol on the display illustrating an association*

between mother as *each fourth image and* father as *the first image.*

- The graphical user interface as in FIG. 4 implied the technique as

discussed above is implemented in *a computer, a display communicably connected to*

the computer, and *a memory communicably connected to the computer for storing the multi-*

level data structure,

Neshatfar does not disclose the technique of *receiving input for one of modifying,*

removing, and creating relationships between concept objects.

White teaches a system for displaying a view window information characterizing

semantics of relations between objects. White further teach the technique of *receiving*

input for one of modifying, removing, and creating relationships between concept objects (White,

FIG. 9, Col. 20, Line 66-Col. 21, Lines 31).

It would have been obvious for one of ordinary skill in the art at the time the

invention was made to include the technique of receiving input for creating relationship

between concept object as taught by White into Neshatfar system and method in order

to have the result of a graphical user interface as show in FIG. 4.

Regarding claim 43, Neshatfar and White, in combination, teach all of the

claimed subject matter as discussed above with respect to 31, Neshatfar further

discloses the steps of *selecting a new concept object from one of the selected concept object, one or*

more parent concept objects, one or more children concept objects, and one or more lateral concept

objects; displaying a fifth image comprising the selected new concept object; displaying one or more

sixth images, each sixth image comprising a parent concept object of the selected new concept object;

displaying a fourth symbol illustrating an association between each sixth image and the fifth image; if

the selected new concept object has one or more child concept objects, displaying one or more seventh

images, each seventh image comprising a child concept object of the selected new concept object, and

displaying a fifth symbol illustrating an association between each seventh image and the fifth image

(Neshatfar, FIG. 4 and the displaying when selecting CPerson). The missing in FIG. 4 is

the claimed *if the selected new concept object has one or more lateral concept objects, displaying one*

or more eighth images, each eighth image comprising a lateral concept object of the selected new

concept object, and displaying a sixth symbol illustrating an association between each eight image and

the fifth image. However, if CPerson has a lateral concept object similar to mother and

father as discussed in claim 31, obviously, the step of displaying an eight image and a

sixth symbol will take place. It would have been obvious for one of ordinary skill in the

art at the time the invention was made to include the step of displaying an eight image

and a sixth symbol if CPerson has a lateral concept object in order to represent

elements and relationships captured in a relational database.

Regarding claim 50, Neshatfar and White, in combination, teach all of the

claimed subject matter as discussed above with respect to claim 35, Neshatfar further

discloses the step of *selecting either a microglossary panel, a term facet panel, a relations facet*

panel or a term phrase editor panel; and displaying the selected panel in a second viewing area

(Neshatfar, FIG. 5).

Claims 44 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Neshatfar et al. [USP 6,490,581 B1] in view of White et al. [USP 6,618,733 B1]

as applied to claim 42 above, and further in view of Cerveri et al. [Java Interface to

Human Anatomy Knowledge].

Regarding claim 44, Neshatfar and White, in combination, teach all of the

claimed subject matter as discussed above with respect to claim 42, Neshatfar further

discloses *the first, second, third and fourth images comprise text strings* (Neshatfar, FIG. 4), but

fails to teach *the first image is highlighted.* However, highlight a selected object is a

conventional technique. For example, this technique is taught by Cerveri as discussed

in previous action (Cerveri, FIG. 5a). It would have been obvious for one of ordinary skill

in the art at the time the invention was made to highlight a selected object in order to

distinguish elements and relationships captured in a relational database.

Regarding claim 45, Neshatfar and White, in combination, teach all of the

claimed subject matter as discussed above with respect to claim 42, Neshatfar further

discloses the step of *displaying the first, second, third and fourth images, and the first, second and*

third symbols within a first viewing area on the display (Neshatfar, FIG. 4).

Claims 46-49 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Neshatfar et al. [USP 6,490,581 B1] in view of White et al. [USP 6,618,733 B1]

as applied to claim 45 above, and further in view of in view of Cerveri et al. [Java

Interface to Human Anatomy Knowledge] and Dorne [USP 5,325,293].

Regarding claim 46, Neshatfar and White, in combination, teach all of the

claimed subject matter as discussed above with respect to claim 45, Neshatfar further

discloses the step of *displaying one or more attributes of the selected concept object in a second*

viewing area on the display (Neshatfar, FIG. 5), but fails to teach *the attributes comprise at least*

one of a medical code and a medical code. Cerveri discloses the step of *displaying one or more*

attributes of the selected concept object in a second viewing area on the display wherein the attributes

comprise at least one of a medical code that relates to a medical concept (Cerveri, FIG. 4).

Dorne teaches a method and system for correlating medical procedures into billing code, for example CPT codes as *billing code* (Dorne, Col. 3, Lines 19-29). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to include a medical code and CPT code as an attribute of a concept object in order to plan a medical procedure for a particular patient.

Regarding claim 47, Neshatfar, White, Cerveri and Dorne, in combination, teach all of the claimed subject matter as discussed above with respect to claim 46, Cerveri further discloses the step of *displaying one or more attributes of the selected concept object in a third viewing area on the display wherein the attributes comprise at least one of a medical code* that relates to a medical concept (Cerveri, FIG. 4), but does not explicitly teach the attributes is a *billing code*. Dorne teaches a method and system for correlating medical procedures into billing code, for example CPT codes (Dorne, Col. 3, Lines 19-29). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to include a CPT code as an attribute of a medical concept as taught by Dorn in order to plan a medical procedure for a particular patient.

Regarding claim 48, Neshatfar, White, Cerveri and Dorne, in combination, teach all of the claimed subject matter as discussed above with respect to claim 47, Cerveri further discloses the step of *displaying one or more terms associated with selected concept object in a fourth viewing area on the display* (Cerveri, FIG. 4).

Regarding claim 49, Neshatfar, White, Cerveri and Dorne, in combination, teach

all of the claimed subject matter as discussed above with respect to claim 48, Cerveri

further discloses the step of *displaying a work area for temporarily storing terms in a fifth viewing*

area on the display (Cerveri, FIG. 4).

Claims 61, 62 and 64-73 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Cerveri et al. [Java Interface to Human Anatomy Knowledge] in

view of White et al. [USP 6,618,733 B1].

Regarding to claim 61, Cerveri teaches a method and system of accessing to

anatomy knowledge through symbolic modality. A user could select the semantic search

and specify an anatomical category into a predefined list to have a hierarchical tree

result as in FIG. 5a. By selecting a particular instances and changing the relationship,

the user can obtain partonomy tree or other characteristics as in FIG. 5b (semantic

search, page 388).

- As shown in FIG. 5a, ethmoid bone as *a medical concept object stored in the*

multi-level data structure is selected and highlighted, and

- the file-like symbol as *a first image comprising* ethmoid bone as *the selected*

medical concept object with a plurality folder-like symbols as *one or more second images*, which

comprising a parent medical concept object of the selected medical concept object is displayed.

- As shown in FIG. 5b is the *display* of *one or more child medical concept objects* of

ethmoid bone represented by folder-like symbol and file-like symbol as *one or more third*

images, which comprising cribriform plate left, olfactory foramina right... respectively as *the child medical concept objects of the selected medical concept object.*

- Returning to FIG. 5b, frontal bone, and occipital bone have a `consist_of` relationship with ethmoid bone and is *displayed* as *one or more lateral medical concept objects* with file-like symbol as *one or more fourth images*, which *comprise a lateral medical concept object of the selected medical concept object.*

- As disclosed by Cerveri, other than `is_a` relationship as hierarchical relationship, non-hierarchical relationships such as `has_function_of`, `is_location_of`, `is_nerved_by`, `consist_of`, `contains`, `affect` have been used to enrich the ontology (page 386). As shown in FIG. 5a and 5b, an indent inward is used to signify the parent-child relationship *an association between each second image and third image to the first image*, a non-indent is used to indicate the non-hierarchical relationships or lateral relationship such as `consist_of` as *an association between each fourth image and the first image*, and obviously, these are *symbols* for *illustrating the association.*

Cerveri does not explicitly teach the step of *receiving input for one of modifying a relationship between two or more concept objects; removing a relationship between two or more concept objects; creating a relationship between two or more concept objects; and creating new concept objects.*

White teaches a system for displaying a view window information characterizing semantics of relations between objects. White further teaches the technique of *creating a relationship between two or more concept objects* (White, FIG. 9, Col. 20, Line 66-Col. 21, Lines 31).

It would have been obvious for one of ordinary skill in the art at the time the invention was made to include the technique of receiving input for creating relationship between concept object as taught by White into Cerveri system and method in order to have the result of a graphical user interface as show in FIG. 4.

Regarding claim 62, Cerveri and White, in combination, teach all of the claimed subject matter as discussed above with respect to claim 61, Cerveri further discloses *the selected medical concept comprises a medical term from systemized nonmedical reference terminology* (page 389).

Regarding claim 64, Cerveri and White, in combination, teach all of the claimed subject matter as discussed above with respect to claim 61, Cerveri further discloses the step of *displaying a medical code from a medical database associated with the selected medical concept* (FIG. 4).

Regarding claim 65, Cerveri and White, in combination, teach all of the claimed subject matter as discussed above with respect to claim 61, Cerveri does not explicitly teach the step of *displaying a medical procedure associated with the selected medical concept.* However, as well known in the art, the UMLS metathesaurus include terminologies designed for use in patient record system, large disease and procedure classification used for statistical reporting and billing (UMLS Knowledge Sources, Metathesaurus). It would have been obvious for one of ordinary skill in the art at the time the invention was

made to modify the Cerveri method and system by linking a medical procedure with a

selected medical concept as in FIG. 4 for displaying in order to plan a medical

procedure for a particular patient.

Regarding claim 66, Cerveri teaches a method and system of accessing to

anatomy knowledge through symbolic modality.

FIG. 5a is the result of the query `retrieve al bones`. The query as *a selection of*

a first concept is *received* by the system. *In response to receiving the selection*, FIG. 5 is

displayed with:

• "bone" is *a first concept object* is *displayed in a central region of* a rectangular

area around the word "bone", *the first concept object* "bone" *corresponding to the* query as

selected first concept.

• "cranical bone" is *a second concept object* is *displayed* around "bone" as *radical*

manner relative to "bone" as *the first concept object such that the second concept object* "cranical

bone" *is positioned outside the central region occupied by the first concept object* "bone".

Cerveri does not explicitly teach the step of *receiving input for one of modifying a*

relationship between two or more concept objects; creating a relationship between two or more concept

objects; removing a relationship between two or more concept objects; and creating new concept

objects.

White teaches a system for displaying a view window information characterizing

semantics of relations between objects. White further teaches the technique of *creating a*

relationship between two or more concept objects (White, FIG. 9, Col. 20, Line 66-Col. 21,

Lines 31).

It would have been obvious for one of ordinary skill in the art at the time the

invention was made to include the technique of receiving input for creating relationship

between concept object as taught by White into Cerveri system and method in order to

have the result of a graphical user interface as show in FIG. 4.

Regarding claim 67, Cerveri and White, in combination, teach all of the claimed

subject matter as discussed above with respect to claim 66, Cerveri further discloses

the step of *displaying additional information corresponding to the concept objects in response to the*

selection of the concept objects (Cerveri, FIG. 5a).

Regarding claim 68, Cerveri and White, in combination, teach all of the claimed

subject matter as discussed above with respect to claim 66, Cerveri further discloses *the*

first concept object is part of a first nomenclature and the one or more second concept objects are part

of one or more second nomenclatures (Cerveri, FIG. 5a).

Regarding claim 69, Cerveri and White, in combination, teach all of the claimed

subject matter as discussed above with respect to claim 66, White further discloses the

step of *displaying windows adjacent to the area for receiving input of at least one of modifying,*

creating, and removing a relationship between two or more concept objects (White, FIG. 9).

Regarding claim 70, Cerveri and White, in combination, teach all of the claimed subject matter as discussed above with respect to claim 69, Cerveri further discloses the step of *displaying one or more of the new concept objects in a radial manner relative to the first concept object* (Cerveri, FIG. 5a).

Regarding claim 71, Cerveri and White, in combination, teach all of the claimed subject matter as discussed above with respect to claim 66, White further discloses the step of *displaying one or more panels comprising work space adjacent to the area and for manipulating the concept objects* (White, FIG. 9).

Regarding claim 72, Cerveri and White, in combination, teach all of the claimed subject matter as discussed above with respect to claim 66, White further discloses the step of *allowing each concept object to be dragged to another portion of the area for modifying the dragged concept object* (White, FIG. 9).

Regarding claim 73, Cerveri and White, in combination, teach all of the claimed subject matter as discussed above with respect to claim 66, Cerveri further discloses the step of *changing the selected second concept to the first concept object and re-displaying a new set of second concept objects in response to a selection of the one or more second concept objects* (Cerveri, FIG. 5a).

Claim 63 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cerveri et al. [Java Interface to Human Anatomy Knowledge] in view of White et al. [USP 6,618,733 B1] as applied to claim 61 above, and further in view of in view of Dorne [USP 5,325,293].

Regarding claim 63, Cerveri and White, in combination, teach all of the claimed subject matter as discussed above with respect to claim 61, but does not teach the step of *displaying a billing code from a medical database associated with the selected medical concept.* Dorne teaches a method and system for correlating medical procedures into billing code, for example CPT codes (Dorne, Col. 3, Lines 19-29). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to include a CPT code as an attribute of a medical concept as taught by Dorn in order to plan a medical procedure for a particular patient.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUNG Q PHAM whose telephone number is 571-272-4040. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JOHN E BREENE can be reached on 571-272-4107. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Examiner Hung Pham
February 4, 2005

SHAHID ALAM
PRIMARY EXAMINER